

ABSTRACT OF THE DISCLOSURE

A semiconductor device includes a boosting circuit for supplying a power supply voltage during a standby state of the semiconductor device. The boosting circuit includes a charge pump circuit and first and second detection circuits for detecting an output voltage of the charge pump circuit. The second detection circuit is operated by a DC current greater than that of the first detection circuit, and is activated by an output (Vdet1) from the first detection circuit. The charge pump circuit is activated based on at least an output (Vdet2) from the second detection circuit.